

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Masato HIRAMATSU, et al.

SERIAL NO: New Application

GAU:

FILED: Herewith

EXAMINER:

FOR: SEMICONDUCTOR STRUCTURE, SEMICONDUCTOR DEVICE, AND METHOD AND APPARATUS FOR
MANUFACTURING THE SAME

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

REFERENCES

- The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.
- A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

RELATED CASES

- Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s) is attached along with PTO 1449.
- A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION

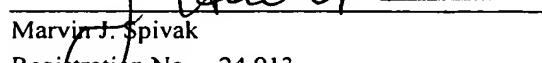
- Each item of information contained in this information disclosure statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

- Please charge any additional fees for the papers being filed herewith and for which no check or credit card payment is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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| Form PTO 1449 (Modified) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTY DOCKET NO. 246036US2 | | SERIAL NO. New Application | |
|--|----|--|------------|-------------------------------|-----------------|--|----------------------------|
| LIST OF REFERENCES CITED BY APPLICANT | | APPLICANT Masato HIRAMATSU, et al. | | | | | |
| | | FILING DATE Herewith | | GROUP | | | |
| U.S. PATENT DOCUMENTS | | | | | | | |
| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS | FILING DATE IF APPROPRIATE |
| | AA | | | | | | |
| | AB | | | | | | |
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| FOREIGN PATENT DOCUMENTS | | | | | | | |
| | | DOCUMENT NUMBER | DATE | COUNTRY | TRANSLATION | | |
| | AK | 2002-289865 | 10/04/2002 | JAPAN (with English Abstract) | YES | NO | X |
| | AL | | | | | | |
| | AM | | | | | | |
| | AN | | | | | | |
| | AO | | | | | | |
| OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.) | | | | | | | |
| | AP | Shinya TSUDA, et al., "PREPARATION AND PROPERTIES OF HIGH-QUALITY a-Si FILMS WITH A SUPER CHAMBER (SEPARATED ULTRA-HIGH VACUUM REACTION CHAMBER)", Japanese Journal of Applied Physics, Vol. 26, No. 1, January 1987, pgs. 33-38 | | | | | |
| | AQ | C. C. TSAI, et al., "'CLEAN' a-Si:H PREPARED IN A UHV SYSTEM", Journal of Non-Crystalline Solids, Vol. 66, 1984, pgs. 45-50 | | | | | |
| | AR | Masato HIRAMATSU, et al., "AN ADVANCED PECVD SYSTEM FOR MASS-PRODUCING HIGH-PURITY Si THIN FILMS", IDW '02 Proceedings of the Ninth International Display Workshops, December 4-6, 2002, 2 pgs | | | | | |
| | AS | Masato HIRAMATSU, et al., "MECHANISM OF OXYGEN CONTAMINATION IN PECVD A-Si:H FILMS", Electrochemical Society Proceedings Volume 2003-08, pgs. 701-707 | | | | | |
| | AT | Toshihiro KAMEI, et al., "DEPOSITION OF ULTRAPURE HYDROGENATED AMORPHOUS SILICON", J. Vac. Sci. Technol. A, Vol. 17, No. 1, Jan/Feb 1999, pgs. 113-120 | | | | | |
| | AU | U. KROLL, et al., "ORIGINS OF ATMOSPHERIC CONTAMINATION IN AMORPHOUS SILICON PREPARED BY VERY HIGH FREQUENCY (70 MHz) GLOW-DISCHARGE", J. Vac. Sci. Technol. A, Vol. 13, No. 6, Nov/Dec 1995, pgs. 2742-2746 | | | | | |
| | AV | A. A. HOWLING, et al., "FREQUENCY EFFECTS IN SILANE PLASMAS FOR PLASMA ENHANCED CHEMICAL VAPOR DEPOSITION", J. Vac. Sci. Technol. A, Vol. 10, No. 4, Jul/Aug 1992, pgs. 1080-1085 | | | | <input type="checkbox"/> Additional References sheet(s) attached | |
| Examiner | | | | | Date Considered | | |
| *Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | | | | | | | |

DOCKET NO.: 246036US2

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STATEMENT OF RELEVANCY

Reference AK (JP 2002-289865) on PTO Form 1449:

This reference is discussed in the specification.